

# AP Calculus BC



- **Course Description:**

This one-year course develops the topics of limits, derivatives and integration, and their formulas for algebraic and transcendental functions, as in AP Calculus AB, and continues to develop parametric equations, slope fields, length of curves, improper integrals, series, etc. After successfully completing Math Analysis, students may select this course as part of their college preparatory track. This course is more rigorous and moves at a quicker pace than its counterpart, AP Calculus AB.

- **Course Expectations:**

This course is for students who want to learn calculus at a faster pace and are willing to put forth correspondingly higher effort. Students typically spend one class period on a topic and are given homework daily. They typically spend at least an hour each night reviewing and working through homework problems. Additionally, students should expect to spend time reviewing and studying for quizzes, tests, and final exams. While students are given fewer problems on homework assignments than the AB class, they are expected to individually work through additional problems as needed to master the topic. The course grade is determined by performance on quizzes, tests and the final exam.

- **Special Projects:**

Following the AP Exam, students complete a project examining a free-response question from the current year's AP exam. In this project, they solve the question and develop a scoring guideline for the response.

- **Beyond the general education course:**

Because of the course's college-level focus, students are expected to take responsibility for their learning. While homework is not collected, students need to be current with the material.

- **Other:**

This class is great preparation for college. All students, regardless of their plans to continue in a math/science path, will benefit. Learning how to approach a college style class, meet teacher expectations, and work rigorously helps to develop study and problem solving skills that are valuable in all fields. As compared to the AB class, this course offers students a more realistic view of the demands in a collegiate math class because it more accurately mimics the pacing and work expectations. Many colleges offer additional credit to students who pass the BC exam, above what they give for the AB exam. In many cases, passing the BC exam also allows students to waive math requirements, potentially accelerating their completion of college.